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Atty Docket No.: 10016512-1

App. Ser. No.: 10/700,065

IN THE CLAIMS:

Please find below a listing of all of the pending claims. The statuses of the claims are set forth in parentheses.

1. (Currently Amended) A semiconductor memory comprising:

a controller;

a media including at least one area, each area providing at least one first group of parallel servo tracks having first information, and at least one group of data tracks parallel to and separated apart from the servo tracks,

wherein the servo tracks are subdivided into first and second preamble areas adjacent to each end respectively and a track region therebetween and each preamble area provides interleaved first and second regions transverse to the tracks, the first information perpendicularly aligned on both sides of a track in the first region and omitted from both sides of the track in the second region;

for each area;

at least one first read/write mechanism adjacent to the first group of parallel servo tracks, each first read/write mechanism including an electron field emitter configured to read the first information;

at least one second read/write mechanism adjacent to the data track, each first read/write mechanism including an electron field emitter;

flexures configured to provide relative motion between the each area and the first and second read/write mechanisms adjacent to each area;

wherein for each area, the controller is configured to receive a first signal generated in response to the first information being read, and wherein the controller is configured to

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generate a second signal provided to the flexures to cause a position of the media to be adjusted relative to the first read/write mechanism electron emitter.

2. (Original) The memory of claim 1, wherein the first information comprises position information.

Claims 3-5. (Canceled)

6. (Original) The memory of claim 1 wherein the controller is configured to generate a third signal configured to cause a timing window to be generated in response to the first signal.

7. (Original) The memory module of claim 6 further comprising:
a read/write mechanism configured to read second information from the media during the timing window.

8. (Original) The memory module of claim 6 further comprising:
a read/write mechanism configured to write second information to the media during the timing window.

9. (Previously Presented) A method of reading information from a semiconductor storage device having at least one area, each area providing at least one first group of parallel servo tracks having first information and at least one group of data tracks parallel to and separated from the servo tracks, at least one first read/write mechanism adjacent to the first

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group of servo tracks and at least one second read/write device adjacent to the data tracks, and at least one flexure configured to provide relative motion between each area and the first and second read/write mechanisms of each area, the method comprising:

reading first information from the first group of parallel servo tracks;
generating a first signal in response to the first information as read; and
comparing the amplitudes of signals detected from said first information stored in a first region adjacent to a servo track to signals detected from first information stored in a second region adjacent to the servo track to generate a second signal using the first signal, the second signal configured to cause second information to be read from at least one data track the media during a first time period.

10. (Original) The method of claim 9 further comprising:

reading the second information from the media during the first time period.

11. (Canceled)

12. (Original) The method of claim 9 wherein the second signal is configured to cause third information to be written to the media during a second time period.

13. (Original) The method of claim 9 further comprising:

writing the third information to the media during the second time period.

14. (Previously Presented) The method of claim 9 further comprising:

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reading the first information from a first cluster on the media; and
writing a second information to a second cluster on the media during the second time period.

15. (Canceled)

16. (Currently Amended) A storage device comprising:

a media that includes at least one area providing a first cluster and separate there from within the same area a second cluster, the first cluster including first information;

first means for generating timing information in response to reading the first information, said first means including means for comparing the amplitudes of signals detected from said first information stored in a first region on said media to signals detected from said first information stored in a second region on said media; and

second means for writing second information in the second cluster using during a timing window determined from the timing information.

17. (Original) The storage device of claim 16 further comprising:

third means for reading third information from the second cluster using the timing information.

18. (Original) The storage device of claim 16 further comprising:

third means for generating position information in response to reading the first information; and

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fourth means for adjusting the media relative to the second means in response to the position information.

19. (Original) The storage device of claim 18 wherein the second cluster includes a plurality of patches, wherein each of the plurality of patches includes a plurality of tracks, and wherein the second means is for writing the second information to one of the plurality of tracks.

20. (Original) The storage device of claim 19 wherein the position information indicates a position of the second means relative to the one of the plurality of tracks.

21. (Original) The storage device of claim 20 wherein the fourth means is for adjusting the media relative to the second means in response to the position information to align the second means with a center of the one of the plurality of tracks.

22. (Currently Amended) A storage device comprising:

a media including servo information provided in a first area separate and apart from at least one data storage area, said servo information including timing information;

a field emitter associated with the media, configured to read the servo information, and configured to read information from or write information to the at least one data storage area during a timing window determined from the timing information;

a controller configured to receive a first signal generated in response to the servo information being read, the controller being configured to generate a second signal, said

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controller including an amplitude comparator for comparing the amplitudes of signals detected from said timing information stored in a first region on said media to signals detected from said timing information in a second region on said media and

a flexure configured to adjust the position of the media relative to field emitter in response to the second signal.

23. (Original) The storage device of claim 22, further comprising:

a second field emitter configured to read second servo from the media; and wherein the controller is configured to adjust the position of the media relative to the second field emitter in response to the second signal.

Claims 24-37. (Canceled)

38. (Previously Presented) A semiconductor memory comprising:

a data storage media having a first group of parallel servo tracks having aligned first and second ends, the tracks having first information adjacent to the tracks and established in a predetermined pattern, the group of servo tracks separate from a group of data tracks;

at least one first read/write mechanism adjacent to the first group of parallel servo tracks, each first read/write mechanism including an electron field emitter configured to read the first information;

flexures configured to provide relative motion between the first read/write mechanism and the first group of parallel servo tracks;

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a controller operable to receive a first signal generated in response to the first information being read and generate a second signal provided to the flexures to cause a position of the media to be adjusted relative to the first read/write mechanism electron emitter.

39. (Previously Presented) The memory of claim 38, wherein the servo tracks are subdivided into first and second preamble areas adjacent to each end respectively and a track region therebetween.

40. (Currently Amended) The memory of claim 39, wherein [[in]] each preamble area provides interleaved first and second regions transverse to the tracks, first information perpendicularly aligned on both sides of a track in the first region and omitted from both sides of the track in the second region.

41. (Previously Presented) The memory of claim 40, wherein the track area provides interleaved first and second regions, first information provided in alternating regions and opposing alignment transverse to each track.

42. (Previously Presented) The memory of claim 41, wherein the first read/write mechanism simultaneously detects pulses of first information on both sides of a track in either preamble region to establish a first amplitude and wherein the first read/write mechanism detects a portion of each first information region in the track area to establish a second amplitude.

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43. (Previously Presented) The memory of claim 42, wherein the first amplitude and the second amplitude are evaluated to generate the second signal.

44. (Previously Presented) The memory of claim 38, wherein the servo tracks are non-concentric.

45. (Previously Presented) The memory of claim 38, wherein the servo tracks are of the same length.

46. (Previously Presented) The memory of claim 38, further including at least one group of data tracks parallel to and separated apart from the servo tracks.

47. (Previously Presented) The memory of claim 46, further including at least one second read/write mechanism adjacent to the data track, each first read/write mechanism including an electron field emitter.

48. (Previously Presented) The memory of claim 1, wherein the servo tracks are equal in length having aligned first and second ends.

49-50. (Canceled).

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51. (Currently Amended) The memory of claim ~~[[50]]~~ 1, wherein the track area provides interleaved first and second regions, first information provided in alternating regions and opposing alignment transverse to each track.

52. (Previously Presented) The memory of claim 51, wherein the first read/write mechanism simultaneously detects pulses of first information on both sides of a track in either preamble region to establish a first amplitude and wherein the first read/write mechanism detects a portion of each first information region in the track area to establish a second amplitude.

53. (Previously Presented) The memory of claim 52, wherein the first amplitude and the second amplitude are evaluated to generate the second signal.

54. (Previously Presented) The memory of claim 9, wherein the servo tracks are equal in length having aligned first and second ends, the servo tracks are subdivided into first and second preamble areas adjacent to each end respectively and a track region therebetween, wherein in each preamble area provides interleaved first and second regions transverse to the tracks, first information perpendicularly aligned on both sides of a track in the first region and omitted from both sides of the track in the second region, and wherein the track area provides interleaved first and second regions, first information provided in alternating regions and opposing alignment transverse to each track.

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55. (Previously Presented) The memory of claim 54, wherein the first read/write mechanism simultaneously detects pulses of first information on both sides of a track in either preamble region to establish a first amplitude and wherein the first read/write mechanism detects a portion of each first information region in the track area to establish a second amplitude.